

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/762,240	01/23/2004	Mark T. Kirsch	8404.004 4511		
7590 07/21/2006 BERENATO, WHITE & STAVISH			EXAMINER PHAM, MINH CHAU THI		
BETHESDA, MD 20817			1724		
			DATE MAILED: 07/21/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	No.	Applicant(s)			
Office Action Summary		10/762,240	i	KIRSCH, MARK T.			
		Examiner	Examiner Art Un		Unit		
		Minh-Chau	T. Pham	1724			
Period fo	The MAILING DATE of this communication apor Reply	ppears on the	over sheet with the c	orrespondence ad	ddress		
A SH WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REP CHEVER IS LONGER, FROM THE MAILING Insions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication. One proof for reply is specified above, the maximum statutory perion to reply within the set or extended period for reply will, by statute to reply received by the Office later than three months after the mailed patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS 1.136(a). In no even od will apply and will oute, cause the applic	S COMMUNICATION t, however, may a reply be time expire SIX (6) MONTHS from the ation to become ABANDONED	I. ely filed the mailing date of this o O (35 U.S.C. § 133).	,		
Status							
2a)⊠	Responsive to communication(s) filed on 30 This action is FINAL . 2b) The Since this application is in condition for allow closed in accordance with the practice under	nis action is no vance except fo	or formal matters, pro		e merits is		
Dispositi	ion of Claims						
5) □ 6) ☑ 7) ☑ 8) □ Applicat i 9) □ 10) □	Claim(s) 1-25 is/are pending in the application 4a) Of the above claim(s) is/are withdrough Claim(s) is/are allowed. Claim(s) 1-9,12,13,15 and 18-25 is/are rejected Claim(s) 10, 11, 14, 16 and 17 is/are objected Claim(s) are subject to restriction and the specification is objected to by the Examination Papers The specification is objected to by the Examination The drawing(s) filed on is/are: a) are Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examination of the specification is objected to by the Examination of the specification is objected to by the Examination of the specification is objected to by the Examination of the specification is objected to by the Examination of the specification is objected to by the Examination of the specification is objected to by the Examination of the specification is objected to by the Examination of the specification is objected to by the Examination of the specification is objected to by the Examination of the specification of the specification is objected to by the Examination of the specification of	rawn from constited. ed to. l/or election reconstruction. ccepted or b) ne drawing(s) be action is required.	quirement.] objected to by the E held in abeyance. See d if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 C	• •		
	under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
2) 🔲 Notic 3) 🔲 Inform	t(s) se of References Cited (PTO-892) se of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 r No(s)/Mail Date	-,	I) Interview Summary (Paper No(s)/Mail Da i) Notice of Informal Pa i) Other:	te	O-152)		

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-9, 12, 13, 15 and 18-25 are <u>again</u> rejected under 35 U.S.C. 103(a) as being unpatentable over Kometani et al (5,720,790), in view of Peng (6,864,195 B2).

Kometani et al disclose a filter element (100) comprising a filter media (110) having filter face portions and at least one side portion joined thereto by a corner portion, a seal (220) or gasket having a bendable contact portion (see 233 in Fig. 26) and homogeneously formed unitarily with the solid resilient material, and the seal being formed directly integrally on the filter media (see Abstract, Figs. 7-10, 18-20, 23-29, col. 3, line 53 through col. 4, line 13, col. 4, lines 25-38 and lines 46-54, col. 8, lines 1-9). Claims 1-9, 12, 13, 15 and 18-25 differ from the disclosure of Kometani et al in that the seal is formed of thermoplastic material which is a thermoplastic elastomers (TPE). instead of non-woven fabric. Peng discloses a seal or gasket material being made of TPE or thermoplastic elastomers (col. 3, lines 14-33, col. 4, lines 24-32) made of particles embedded in ethylene-propylene terpolymer, wherein these materials have found utility in many applications which previously used vulcanized rubber, e.g. hose, gaskets, and the like (col. 4, lines 19-32). Peng further discloses TPO is well-known to be useful in producing gaskets or seals through conventional extrusion, calendaring or injection molding processes (see col. 3, lines 14-17). It is inherently understood that TPO is used in the production of filter element with sealing or gasket means via injection molding process. It would have been obvious to a person having ordinary skill in the art

at the time the invention was made to provide thermoplastic elastomers as taught by Peng as the seal in the filtering apparatus of Kometani et al since it is well-known in the art that TPE produces finished articles having resilient rubber-like properties without the need for vulcanizing cure of the finished articles (col. 3, lines 26-28).

Double Patenting

Claims 1, 3, 5, 6, 8-10 and 12-18 of this application <u>again</u> conflict with claims 1, 4, 5, 7-9 and 11-16 of Application No. 10/404,109. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

Allowable Subject Matter

Claims 10, 11, 14, 16 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: None of the prior arts discloses the structure of the seal wherein there are two flanges extending obliquely in divergent directions with respect to the filter face, the two flanges having a gap therebetween which widens as the free ends of the flanges bend away from one another when the lid is closed.

Response to Arguments

Applicant's arguments filed on May 30, 2006 have been fully considered but they are not persuasive.

Applicant argues that "the seal of Kometani et al is not a seal of substantially solid thermoplastic material, but it is made of non-woven fabric and is unitary with the pleated filter". The Examiner respectfully agrees. The Examiner would like to point out that Kometani et al disclose a filter element (100) comprising a filter media (110) having filter face portions and at least one side portion joined thereto by a corner portion, a seal (220) or gasket having a bendable contact portion (see 233 in Fig. 26) and homogeneously formed unitarily with the solid resilient material, and the seal being formed directly integrally on the filter media (see Abstract, Figs. 7-10, 18-20, 23-29, col. 3, line 53 through col. 4, line 13, col. 4, lines 25-38 and lines 46-54, col. 8, lines 1-9). The Examiner realizes that Kometani et al does not disclose the seal being a substantially solid thermoplastic material, and introdudes a secondary reference Peng as a combination under the 103 rejection to show that Peng discloses a seal or gasket material being made of TPE or thermoplastic elastomers (col. 3, lines 14-33, col. 4, lines 24-32) made of particles embedded in ethylene-propylene terpolymer, wherein these materials have found utility in many applications which previously used vulcanized rubber, e.g. hose, gaskets, and the like (col. 4, lines 19-32). Peng further discloses TPO is well-known to be useful in producing gaskets or seals through conventional extrusion, calendaring or injection molding processes (see col. 3, lines 14-17). It is inherently understood that TPO is used in the production of filter element with sealing or

gasket means via injection molding process. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to adopt the thermoplastic elastomers as taught by Peng as the seal in the filtering apparatus of Kometani et al since it is well-known in the art that TPE produces finished articles having resilient rubber-like properties without the need for vulcanizing cure of the finished articles (col. 3, lines 26-28).

In response to applicant's argument that the Peng reference is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Peng discloses a <u>seal</u> or <u>gasket</u> material being made of TPE or thermoplastic elastomers (col. 3, lines 14-33, col. 4, lines 24-32) made of particles embedded in ethylene-propylene terpolymer, wherein these materials have found utility in many applications which previously used vulcanized rubber, e.g. hose, <u>gaskets</u>, and the like (col. 4, lines 19-32). Peng further discloses TPO is well-known to be useful in producing gaskets or seals through conventional extrusion, calendaring or <u>injection molding</u> processes (see col. 3, lines 14-17). It is inherently understood that TPO is used in the production of filter element with sealing or gasket means via injection molding process.

Regarding to the double patenting issue, there is no difference between a "solid resilient thermoplastic material" and a "cell-less resilient thermoplastic material" since

thermoplastic material is very well-known and widely used in sealing or gasket material. Therefore, the double patenting rejection is proper and hereby made final. Claims 10, 11, 14, 16 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. However, a Terminal Disclaimer is requested to overcome the double patenting issue as discussed above.

Applicant's arguments with respect to claims 1-25 have been thoroughly considered but are most in view of rejection, as discussed above.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571) 272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Minh-Chau Pham Patent Examiner

Art Unit: 1724 July 17, 2006 DUANE SMITH PRIMARY EXAMINE

19-06